



BREVETOXIN

Agent Overview:	Brevetoxins (BVX) are neurotoxins produced by algae believed responsible for massive fish kills from red tides. The toxin can be passed to humans via shellfish and cause neurotoxic shellfish poisoning (NSP). After oral ingestion, brevetoxin poisoning is characterized by abdominal pain, vomiting, and diarrhea, skin tingling or pricking (paresthesias), reversal of hot and cold temperature sensation, vertigo, headache, muscular uncoordination (ataxia), decreased heartbeat (bradycardia), and pupil dilation. Inhalational exposure can result in cough, dyspnea, and bronchospasm. The incubation period ranges from 15 minutes to 18 hours. Brevetoxin can be detected in environmental samples in commercial laboratories and by an enzyme-linked immunosorbent assay (ELISA) method in biologic samples.
Lab Specimen Submittal:	Authorization by Dr. Jane Getchell, Director DPHL; Christina Pleasanton, Deputy Director DPHL; or Tara Lydick, Chemical Terrorism Coordinator.
Type of Specimens Necessary for Testing:	<u>Urine:</u> 25mL-50mL screw-cap container <u>Whole blood:</u> <ul style="list-style-type: none">- Three, 5 or 7 mL purple-top (EDTA) tubes (vacuum fill only) AND- One, 5 or 7 mL gray-top or green-top (vacuum fill only) AND- Two empty urine cups and two empty blood tubes for each lot # submitted.
Packaging Instructions:	<u>Urine:</u> freeze specimen upon collection and ship on dry ice; label specimens and package individually; wrap with absorbent material. <u>Whole blood:</u> place filled tubes in a shipping rack for stability, wrap the tubes in absorbent material, and secure with tape. Place the packaged tubes in a secondary unbreakable container. Specimens may be shipped cold but <i>must not</i> be frozen. <u>All:</u> wrap sample containers and layers with tamper-proof, waterproof forensic evidence tape initialed by collector, being careful not to cover the sample labels. Ship to DPHL as Biological Substance, Category B (Packing Instruction 650).
Receiving Specimens at DPHL:	Authorized specimens are received at the laboratory's rear (loading dock) entrance. Submitters must present ID and complete proper forms.
Handling of Specimens:	Chain of custody procedures must be followed. Urine specimens should be frozen upon collection.
Reporting Results:	Reference laboratory will notify DPHL as soon as possible. The Potential Exposure Call Log and Information form will provide information for notification of testing results outside of the DPHL.
Contact Information:	Jane Getchell, DrPH, Director DPHL, 302-223-1520 (24/7 coverage)

24/7 Emergency Contact Number: 1-888-295-5156

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